

**EDUCATION****Harvey Mudd College, Claremont, CA****Expected May 2023***B.S. in Computer Science-Math (GPA 3.828)*

VEX Scholarship Recipient, Dean's List (SP20, FA20, SP21, FA21, SP22)

Relevant Coursework: Data Structures/Program Development, Discrete Mathematics, Linear Algebra, Probability and Statistics, Scientific Computing, Digital Design & Computer Architecture, Algorithms, Operations Research, Computer Systems, Programming Languages, Advanced Linear Algebra**SKILLS****Languages:** C/C++, Python, JavaScript (NodeJS, Typescript), Java, Unix, Julia, R, Matlab, AMPL**Databases:** PostgreSQL, AWS DynamoDB, MongoDB, Google Firestore, SQLite**Libraries/Frameworks:** Express, React-Native, NumPy, Pandas, Google Cloud Platform, Amazon Web Services**RELEVANT EXPERIENCE****Amazon, Seattle****May 2022 - Present***Software Development Engineer Intern*

- Designed and developed a web dashboard for the Amazon Smart Air Quality Monitor using React/Redux.
- Architected and implemented a backend using AWS services (Lambda, API Gateway, CloudWatch, CloudFormation) to serve website mock data.
- Delivered an end-to-end product hosted on AWS CloudFront and authentication using Amazon

**AMISTAD Lab, Claremont****May 2021 - Present***Research Student*

- Organized meetings and set deadlines for a team of 3 students studying genetic algorithms and their application in algorithmic search.
- Correlated the coherence and function of artifacts generated by genetic algorithms.
- Collected, analyzed, and visualized over 400GB of data using NumPy, Pandas, Matplotlib, and SQLite.
- First author on 2 publications presented at the International Conference on Agents and AI 2021.

**Prosperly, Remote****Apr 2021 - Aug 2021***Backend Intern*

- Designed and optimized the schema for REST interfaces and databases (relational and non-relational).
- Created multiple Express microservices to facilitate business logic for an application in a RESTful manner.
- Developed several AWS DynamoDB, RDS libraries to support all mobile app backend services.
- Standardized a testing framework for integration and unit testing using Postman and Jest.

**Lulu, Remote****Dec 2020 - Mar 2021***Backend Intern*

- Spearheaded backend development to connect Lulu App to its backend services.
- Improved over 30 HTTP routes by organizing and structuring them into a REST-compliant Express server.
- Optimized the performance of Express routes by 500% by profiling and analyzing structural bottlenecks.
- Reduced the failure rate of the routes from 20 failures per day to 0 by creating standard protocols.

**Swollio****June 2020 - Sept 2020***Co-creator*

- Co-created and built an app to connect coaches to their athletes and monitor progress on Swollio.
- Established the design architectures for both the relational database and RESTful interface.
- Created React-Native front end with an Express/PostgreSQL backend to allow users to interact with the app.
- Deployed an app using Google Cloud Services and published it to Apple's App Store.

**LEADERSHIP EXPERIENCE****Harvey Mudd College, Claremont****Jan 2021 - Present***Teaching Assistant*

- Grader/tutor for CS70: Data Structures and Program Development at Harvey Mudd College.
- Hosted weekly tutoring sessions to explain concepts, debug programs, and help with testing